

# DARE



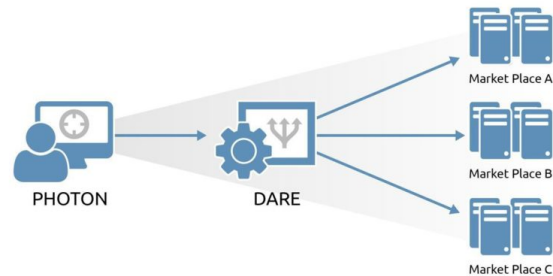
- Product
- Market Data Nexus
- CEP
- Smart Order Routing
- Strategy Engines
- DARE
- Photon
- System Administration
- Database Access Layer and Persistence
- Threading Model
- High Availability and Failover

## DARE

### DARE

DARE is Marketcetera's powerful order routing engine. It is built upon the open source [QuickFIX/J](#) framework and provides bi-directional message handling, receiving orders from multiple strategies and routing them to broker and execution destinations.

The Marketcetera DARE order routing engine puts control over order flow back in the hands of the trader, where they are free to seek out the most competitive rates for their business. DARE incorporates a FIX engine which greatly simplifies connecting to exchanges or brokers. This FIX Engine is a class library which implements all important aspects of the FIX protocol in all of its versions, from 4.0 to 4.4. Buy-side firms can take advantage of the connectivity DARE provides in two different ways: direct order routing, where your firm connects directly to your counterparty; or via one of the many order routing hubs that have emerged as gateways to networks of sell-side firms, exchanges, ECN's and ATS's worldwide. These two models can be used separately or in tandem – enabling buy-side firms to start trading the way they want to immediately.



The DARE order routing engine provides centralized certification of connected parties in compliance with FIX. All counterparties are certified in a consistent, reliable format. DARE handles all FIX version translations, including translation to/from non-FIX messaging standards, which eliminates the need to support multiple systems for each counterparty and minimizes system changes as a result of on-going advances in technology. DARE provides full support for customized FIX messaging, including support for all algorithms.

DARE is built on the concept of a “pluggable transport” which enables clients to deploy their preferred message middleware. Marketcetera ships with ActiveMQ out of the box, but our clients have the control to swap out our message bus for their preferred solution. DARE offers a separation between the message formats, session handling and the transport middleware. Implementation of adapters for specific middleware may be developed and injected transparently inside the infrastructure. Several adapters have been developed including pure socket, JMS, RMDS, RV, SOAP, FIX and others.

Order routing is achieved out of the box using the FIX protocol but it is also possible to use non-FIX connections. DARE supports multiple simultaneous connections, including dark pools, gateways, brokers, exchanges, etc., which means that strategies can choose to route orders to any one of the established connections depending on whatever criteria implemented by the trader. This is how we help our clients address requirements for “smart order routing” by implementing execution algorithms that route orders to the broker or exchange based on arbitrary criteria, such as setting up a Strategy Engine to catch rejected execution reports and automatically reroute the orders to another broker.

DARE manages all system communications regarding orders, broker connections, and more, ensuring your strategies are executed quickly, correctly, and efficiently. Enhancing your ability to control and modify your system, our Message Modifier API provides streamlined integration points to and from DARE to add logic for pre-trade compliance and risk management. Additionally, DARE ensures security and confidentiality of your system by authenticating end-users and applications through Java Authentication and Authorization Service (JAAS) on your secure network. Efficiently and transparently execute orders and decisions made by Strategy Engines with the Marketcetera DARE order routing module.

**Benefits**

- Scalable, robust and globally proven FIX-enabling toolbox
- Low latency, low footprint
- Easy counterparty connectivity
- Easy integration with (and within) internal systems
- FIX dialects for non-standard FIX connections
- An open component model for tailored message processing